

Austrian Council

Green Paper “From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation funding”

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Information about the respondent:

The Austrian Council is located in Vienna, Austria. The main task of the Austrian Council for Research and Technology Development is to advise the Austrian Government on all issues relating to research, technology and innovation policy. The main goal of its work is to provide essential input to a future-orientated RTI policy. In doing so, the Austrian Council sees itself as a central node in the network of the broad technology and research landscape, as a coordinator and amplifier of a wide range of activities, as a bridge between actors, as a filter, and most of all as a driving force for the setting of priorities.

The Council does not receive funding from any EC programme.

The Council will submit a written response to this consultation.

Summary

The main recommendations for the Common Strategic Framework (CSF) reflect the position paper of the Austrian Council

- The focus of the CSF on tackling Grand Societal Challenges based on the Europe 2020 strategy is most welcome. The CSF should support the research, development and innovation (RDI) priorities and should combine different funding schemes.
- European, national and regional funding schemes should complement each other wherever possible. For instance, Structural Funds should provide the basis for participation in the innovation process; frontier research should be supported as should the participation of SMEs.
- The CSF should have a transparent and harmonised structure. It should ensure simplicity based on a common set of basic rules applicable to all EU-level instruments and to all the relevant national /

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“matching funds” instruments, and ensure a trust-based approach to funding.

- The CSF should close the gap in the innovation cycle between applied research and the market and should provide practicable solutions for greater cooperation between the regional, national and EU levels.
- Excellence must be more strongly embedded in the system of higher education. New career models must be developed and the EU instruments must take into account that mobility and research careers depend directly upon the funding schemes.
- The set of instruments employed should be streamlined. Moreover, the use of small or large funding schemes (projects) should be based on a well-conceived strategy with clearly defined goals.

Working together to deliver on Europe 2020

Today we have a very complex funding structure in Europe and researchers can choose from among a variety of funding instruments. This legacy system is now about to undergo fundamental change. The Common Strategic Framework (CSF) should cover all needs to make the funding schemes more attractive for both newcomers and established research institutions. This simplification process should therefore solve all the well-known problems such as the huge amount of red tape, time-to-contract and different sets of rules.

A transparent and harmonised structure will motivate more SMEs and regional players to participate on an EU level. This is necessary to close the gap in the innovation cycle between applied research and the market. National agencies should support their customers as a one-stop-shop and provide practicable solutions for increased cooperation between the regional, national and EU levels.

The frequently cited grand challenges should form the thematic pillars of the next funding period. It is necessary to cover the whole innovation cycle from frontier research to market uptake within these thematic fields. This can only be achieved by a coordinated and focussed programme structure that allows European researchers to cooperate in an excellent network under optimal conditions. At the EU level in particular, financial stability is given for a period several years, thus maintaining competition between researchers throughout the EU. The Joint Programming Initiative has great potential to foster regional and EU priorities. It is therefore necessary to bring the participation rules into line with those of other instruments. The CSF has the power to harmonise the

different sets of rules while at the same time maintaining flexibility. For this purpose, it is not necessary to reinvent the wheel and work should proceed on the basis of an evaluation of existing rules.

The mix of smaller, targeted, and larger strategic projects should be planned in a timeline and should reflect the needs of the full innovation cycle. Given that R&D forecasts extending seven years or more cannot be precise, a roadmap should provide guidance as to which parts of the programmes interact and are mutually dependent.

Long term monitoring can indicate the success of funding, but interaction with other initiatives means it is not possible to arrive at a clear and reliable interpretation of the overall system. National surveys of success – e.g. the Proviso report in Austria – indicate the success rate of researchers at the EU level. The innovation scoreboard shows the success in achieving the goals compared to other countries. Due to the raising of the quota of frontier research it is very difficult to estimate the impact research will have several decades hence. One approach should be to investigate how satisfied the stakeholders are with the conditions: Researchers can be asked to evaluate the simplification process, mobility options, thematic focus, etc., the industrial partners to evaluate the technology transfer, cooperation with academia, access to know-how, etc.

In the area of innovation the relation between cohesion policy and research funding has a great deal of potential. New member states should be encouraged by established countries to join the necessary networks of excellent research in order to learn the processes and rules governing EU funding programmes. The cohesion policy should take into consideration the lack of excellence and indeed the complete absence of structures and regional support agencies for researchers in new member states. To bring in the new member states as equal partners in the ERA, structural funds should provide the basis for participation in the innovation process. Structural funds should earmark part of the budget for innovation and the countries should bear this in mind when developing national programmes.

Tackling Societal Challenges

The relationship between science, research, technology, innovation and society cannot be reduced solely to the appropriate form of communicating information. A productive dialogue needs forms of communication and negotiation that not only satisfy increasing democratic demands, but are also capable of assuming a translation function in cases where there are conflicting values.

While research, technology and innovation change all our lives, knowledge of the processes and developments, repercussions and risks in these areas have not spread with the same vehemence. For large sections of the population these areas remain “black boxes” and it is by no means clear to all members of the public why massive investments should be made here. The societal challenges can influence the thematic focus in terms of the grand challenges of the next period and should be supported by all member states. But the agenda driven activities should only be one part of the framework – curiosity-driven research as a bottom up approach should create the room for new solutions and ways of thinking. The ERC, which covers mostly frontier research, is a valuable instrument to support this. There should be no gap between thematically open research areas and agenda driven activities, the EC must offer instruments to hand over new ideas to applied research and then to the market. In this manner, we can ensure that the market obtains fresh ideas and research is aware of new approaches to overcome societal challenges. Additionally an action plan should define activities to involve citizens and raise public awareness of research. This should include all forms of awareness-building activities, the presentation of the latest research results and their benefit to society, inspiring students to take up a career in research and generating a direct feedback loop from society to policymakers. This opens up possibilities and space for a critical examination and informed discussion of important issues that are of public interest and in which civil society, interest groups, scientists and researchers as well as policymakers can participate with a view to generating “socially robust knowledge”. A system of incentives should be developed to encourage scientists and researchers to actively engage in a dialogue with the public.

Strengthening competitiveness

The Austrian Council is convinced that research, technology and innovation have fundamentally positive impacts. In particular, the effects on competitiveness and the contribution that can be made to solving major social challenges - climate change, scarcity of natural resources, biodiversity, problems concerning waste, an ageing population etc. - are regarded as important. There is still a great deal of potential here, which can however, only be developed with a holistic policy approach. Technological innovations alone cannot solve the problems we face. There also has to be a stronger focus on social innovations.

Suitable instruments should be created and EU-wide harmonised tax incentives for business put in place to stimulate additional private-sector financing of RTI in general and university research in particular. Non-university and collaborative research institutes require a long-term strategic focus in terms of the overall system and budgetary planning certainty. The seven-year EU framework should be the basis for the timeline of programmes in the member states. A goal-orientated coordination of national programmes with the new Framework Programme will help improve the international networking of researchers and intensify research cooperation within the EU and other states.

Support for the transfer of technology should be expanded and intensified by implementing measures such as the exchange of scientific personnel between scientific institutions and business enterprises. Support to safeguard licences and intellectual property rights (IPR) while upholding the interests of all parties concerned should close the gap between research and the market. The Framework should consider giving support with regard to access to the patent system and technology exchanges. All activities should make it easier for companies to bring innovations to market.

Public funding for projects should be linked to the subjective risk for the company. The risk should be high and should enable the company to carry development forward so that it can reach the next step on the innovation chain. The amount of funding should be adjusted according to the level of risk involved in the project. To do this, the companies should be segmented according to innovation types and subsidies adjusted to their individual needs. The definition of types of innovation and companies must be orientated to the nature of the innovation project, the innovation intensity of the industries and the state of the art and scientific knowledge. Innovation management programmes should create the appropriate internal company conditions to increase the innovative strengths in SMEs.

Strengthening Europe's science base and the European Research Area

Excellence must be more strongly embedded in the system of higher education. Furthermore, competition between the universities and between scientists and research teams should be encouraged in order to stimulate excellence in research. Core funding at the universities and the ERC programmes should be used to create incentives to open up new fields of research. In this context, attention should be drawn to the importance of overhead financing, as this is an efficient steering instrument in terms of visibility and high-calibre research, and should therefore be further expanded. Industry and science should be

strengthened in the educational sector and should work together at an institutionalised level. To this end, existing initiatives should be continued and a doctoral programme established as a private-public-partnership under the academic supervision of the universities to bring questions from business and society into the domain of higher education. Business, industry and society will thus provide an impetus for science and excellence.

New career models must be developed for women in research to improve work-life balance. This is a task for the member states, but the EU instruments must take into account that mobility and research careers depend directly on the funding offered. Above all, it is necessary to recognise career interruptions. In particular, assessment criteria for grants and other subsidies should be revised and EU-wide university careers made more attractive for women and those wishing to start or switch careers at a later date.

Infrastructure for research, technology development and innovation is a key determinant for the performance of an innovation system. Internationally, RTI infrastructure is increasingly perceived to be a variable in its own right, which requires separate consideration just like other determinants of a country's national innovation performance such as human resources, financing or instruments. This is also reflected in the importance the European Union ascribes to RTI infrastructure for successfully positioning the European Research Area in international competition in the long term. In recent years there has been a paradigm shift in research policy within the European Union. On the one hand, the establishment of the European Research Council (ERC) has broadened the scope of common research support measures to include basic research (thus increasing competition in this domain). On the other, the implementation of the European Research Area has highlighted the issue of a common focus for national investments in RTI. Creating a European research infrastructure remains a challenge that should be solved at the European level.

A global strategy should be supported by the coordinated presentation of Europe as a centre of science and research, the dissemination in non-EU countries of information about the scientific community and industry, strategic scientific and innovation activities, as well as targeted advertising of Europe as a location for study, research and innovation.